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<input type="checkbox"/>	L7	aeropyrum same L5	0
<input type="checkbox"/>	L6	pernix same L5	0
<input type="checkbox"/>	L5	(ATP or ADP or cofactor) same L3	19
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<input type="checkbox"/>	L1	((heat same resistant same DNA same ligase?) or (DNA same ligase?) or (DNA same joinase?) or (DNA same repair same enzyme) or (polynucleotide same ligase?))	7454

END OF SEARCH HISTORY

=> index bioscience medicine

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 12:27:09 ON 22 DEC 2005

=> s ((heat(s)resistant(s)DNA(s)ligase#) or (DNA(s)ligase#) or (DNA(s)joinase#) or (DNA(s)repair(s)enzyme) or (polynucleotide(s)ligase#))

89 FILE ADISCTI
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5 FILE ADISNEWS
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3379 FILE SCISEARCH
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6 FILE WPIFV
1252 FILE WPINDEX
10 FILE IPA
5 FILE NAPRALERT
174 FILE NLDB

L1 QUE ((HEAT(S) RESISTANT(S) DNA(S) LIGASE#) OR (DNA(S) LIGASE#) OR (DNA(S)
JOINASE#) OR (DNA(S) REPAIR(S) ENZYME) OR (POLYNUCLEOTIDE(S) LIGASE#))

=> d rank

F1 240382 GENBANK
F2 25884 USPATFULL
F3 10211 DGENE
F4 6823 CAPLUS
F5 4734 BIOSIS
F6 4705 MEDLINE
F7 4210 TOXCENTER
F8 3379 SCISEARCH
F9 3328 LIFESCI
F10 3202 ESBIODBASE
F11 3079 EMBASE
F12 2980 BIOTECHNO
F13 2518 BIOTECHABS
F14 2518 BIOTECHDS
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F16 1651 PASCAL
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F19 1029 IFIPAT
F20 723* FEDRIP
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F23 459 CABA
F24 326 DRUGU
F25 280 BIOENG
F26 244 PROMT
F27 239 AGRICOLA
F28 174 NLDB
F29 168 DDFU
F30 107 NTIS

=> file f2, f4-f14, f17

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=> s L1

L2 66094 L1

=> s (gene# or sequence# or polynucleotide#) (s) L2

7 FILES SEARCHED...

L3 32422 (GENE# OR SEQUENCE# OR POLYNUCLEOTIDE#) (S) L2

=> s (temperature# or heat or therm?)(s)L3

11 FILES SEARCHED...

L4 6055 (TEMPERATURE# OR HEAT OR THERM?)(S) L3

=> s (ATP or ADP or cofactor#)(s)L4

L5 1203 (ATP OR ADP OR COFACTOR#)(S) L4

=> s (mg or mn or ca or co)(s)L5

L6 333 (MG OR MN OR CA OR CO)(S) L5

=> s pernix(s)L6

L7 4 PERNIX(S) L6

=> s aeropyrum(s)L6

L8 4 AEROPYRUM(S) L6

=> s organism# (s)L6

L9 30 ORGANISM# (S) L6

=> dup rem l9

PROCESSING COMPLETED FOR L9

L10 30 DUP REM L9 (0 DUPLICATES REMOVED)

=> dup rem l7

PROCESSING COMPLETED FOR L7

L11 2 DUP REM L7 (2 DUPLICATES REMOVED)

=> d ibib abs L10 1-30

L10 ANSWER 1 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2005:274547 USPATFULL

TITLE: Flea head, nerve cord, hindgut and malpighian tubule
nucleic acid molecules, proteins and uses thereof

INVENTOR(S): Brandt, Kevin S., Windsor, CO, UNITED STATES
Gaines, Patrick J., Fort Collins, CO, UNITED STATES
Stinchcomb, Dan T., Fort Collins, CO, UNITED STATES
Wisniewski, Nancy, Fort Collins, CO, UNITED STATES

PATENT ASSIGNEE(S): Heska Corporation (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2005239103 A1 20051027

APPLICATION INFO.: US 2004-978245 A1 20041029 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-991936, filed on 21
Nov 2001, PENDING Division of Ser. No. US 2000-543668,
filed on 7 Apr 2000, ABANDONED

NUMBER DATE

PRIORITY INFORMATION: US 1999-128704P 19990409 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HESKA CORPORATION, INTELLECTUAL PROPERTY DEPT., 3760
ROCKY MOUNTAIN AVE, LOVELAND, CO, 80538, US
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 7785
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to flea head, nerve cord, hindgut and Malpighian tubule proteins; to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising proteins, nucleic acid molecules, or protective compounds derived from proteins of the present invention as well as the use of such therapeutic compositions to protect animals from flea infestation. Also included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule proteins to derive inhibitory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2005:151351 USPATFULL
TITLE: Compositions isolated from bovine mammary gland and methods for their use
INVENTOR(S): Havukkala, Ilkka J., Remura, NEW ZEALAND
Glenn, Matthew, Whenuapai, NEW ZEALAND
Grigor, Murray R., Glendowie, NEW ZEALAND
Molenaar, Adrian J., Hamilton, NEW ZEALAND
PATENT ASSIGNEE(S): GENESIS RESEARCH AND DEVELOPMENT CORP. LTD., Parnell,
NEW ZEALAND (non-U.S. corporation)
AGRESEARCH LTD., Hamilton, NEW ZEALAND (non-U.S. corporation)

NUMBER	KIND	DATE

PATENT INFORMATION: US 2005130263 A1 20050616		
APPLICATION INFO.: US 2003-617316 A1 20030709 (10)		
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-699146, filed on 27 Oct 2000, ABANDONED		

NUMBER	DATE

PRIORITY INFORMATION: US 1999-162702P 19991029 (60)	
DOCUMENT TYPE: Utility	
FILE SEGMENT: APPLICATION	
LEGAL REPRESENTATIVE: Janet Sleath, SPECKMAN LAW GROUP, Suite 100, 1501 Western Avenue, Seattle, WA, 98101, US	
NUMBER OF CLAIMS: 21	
EXEMPLARY CLAIM: 1	
LINE COUNT: 7006	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Isolated polynucleotides encoding polypeptides expressed in bovine mammary gland tissue are provided, together with genetic constructs and host cells comprising such isolated polynucleotides. Methods for the use of such polynucleotides and polypeptides are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2005:250255 USPATFULL
TITLE: Methods and compositions for inhibition of membrane fusion-associated events, including HIV transmission
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, UNITED STATES
Lambert, Dennis Michael, Cary, NC, UNITED STATES

Petteway, Stephen Robert, Cary, NC, UNITED STATES
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, UNITED STATES (U.S.
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6951717 B1 20051004
APPLICATION INFO.: US 1995-484741 19950607 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun
1995, PENDING Continuation-in-part of Ser. No. US
1994-360107, filed on 20 Dec 1994, Pat. No. US 6017536
Continuation-in-part of Ser. No. US 1994-255208, filed
on 7 Jun 1994, PENDING Continuation-in-part of Ser. No.
US 1993-73028, filed on 7 Jun 1993, Pat. No. US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 94 Drawing Figure(s); 93 Drawing Page(s)
LINE COUNT: 43743

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Parainfluenza virus types 1 to 4 (PIV1 to PIV4) are important human
pathogens that cause upper and lower respiratory tract infections,
particularly in infants and children. The claimed invention is directed
toward novel methods for the inhibition of parainfluenza virus
transmission to a cell involving the administration of synthetic peptide
fusion inhibitors. These inhibitors are derived from the parainfluenza
virus and vary in length between 16 to 39 amino acids. The peptides were
identified by screening for the presence of fusion inhibitory motifs
(e.g., ALLMOTIS, 107x178x4, and PLZIP) within the parainfluenza virus
genome. A number of peptides were identified and their fusion inhibitory
activities ascertained. These peptides should provide useful antiviral
agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2004:274256 USPATFULL
TITLE: Novel human hydrolase family members and uses thereof
INVENTOR(S): Meyers, Rachel E., Newton, MA, UNITED STATES
Glucksmann, Maria Alexandra, Lexington, MA, UNITED
STATES
Curtis, Rory A. J., Framingham, MA, UNITED STATES
Rudolph-Owen, Laura A., Jamaica Plain, MA, UNITED
STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2004214758 A1 20041028
APPLICATION INFO.: US 2002-193452 A1 20020711 (10)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-816664, filed
on 23 Mar 2001, ABANDONED

NUMBER DATE

PRIORITY INFORMATION: US 2000-191973P 20000324 (60)
US 2000-199559P 20000425 (60)
US 2000-206036P 20000522 (60)
US 2000-205442P 20000519 (60)
US 2000-209949P 20000606 (60)
US 2000-214948P 20000629 (60)
US 2000-220008P 20000721 (60)
US 2000-220040P 20000721 (60)
US 2000-226774P 20000821 (60)
US 2000-235033P 20000925 (60)
US 2000-238170P 20001005 (60)
US 2001-267054P 20010207 (60)

US 2000-213688P 20000623 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Intellectual Property Group, MILLENNIUM
PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA,
02139

NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 62 Drawing Page(s)
LINE COUNT: 68657

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated 26443, 46873, 61833, 26493, 58224, 46980, 32225, 47508, 56939, 33410, 33521, 23479, 48120, 46689, 80091, and 46508 nucleic acid molecules, which encode novel human hydrolase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 26443, 46873, 61833, 26493, 58224, 46980, 32225, 47508, 56939, 33410, 33521, 23479, 48120, 46689, 80091, or 46508 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 26443, 46873, 61833, 26493, 58224, 46980, 32225, 47508, 56939, 33410, 33521, 23479, 48120, 46689, 80091, or 46508 gene has been introduced or disrupted. The invention still further provides isolated 26443, 46873, 61833, 26493, 58224, 46980, 32225, 47508, 56939, 33410, 33521, 23479, 48120, 46689, 80091, or 46508 proteins, fusion proteins, antigenic peptides and anti-26443, 46873, 61833, 26493, 58224, 46980, 32225, 47508, 56939, 33410, 33521, 23479, 48120, 46689, 80091, or 46508 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 5 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:69593 USPATFULL

TITLE: Fusion proteins comprising DP-178 and other viral

fusion inhibitor peptides useful for treating aids
INVENTOR(S): Bolognesi, Dani Paul, Durham, NC, UNITED STATES
Matthews, Thomas James, Durham, NC, UNITED STATES
Wild, Carl T., Durham, NC, UNITED STATES
Barney, Shawn O'apos, Lin, Cary, NC, UNITED STATES
Lambert, Dennis Michael, Cary, NC, UNITED STATES
Petteway, Stephen Robert, Cary, NC, UNITED STATES
Langlois, Alphonse J., Durham, NC, UNITED STATES

PATENT ASSIGNEE(S): Duke University (U.S. corporation)
Trimeris, Inc. (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2004052820 A1 20040318
APPLICATION INFO.: US 2002-267748 A1 20021008 (10)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-484223, filed on 7 Jun 1995, PENDING Division of Ser. No. US 1995-470896, filed on 6 Jun 1995, GRANTED, Pat. No. US 6479055
Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994, GRANTED, Pat. No. US 6017536
Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994, GRANTED, Pat. No. US 6440656
Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, GRANTED, Pat. No. US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711

NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 83 Drawing Page(s)
LINE COUNT: 40442

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178

(SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 6 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:301902 USPATFULL

TITLE: Methods for inhibition of membrane fusion-associated events, including HIV transmission

INVENTOR(S): Bolognesi, Dani Paul, Durham, NC, United States
Mathews, Thomas James, Durham, NC, United States
Wild, Carl T., Durham, NC, United States

PATENT ASSIGNEE(S): Duke University, Durham, NC, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6824783 B1 20041130
APPLICATION INFO.: US 1995-487266 19950607 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun 1995, now patented, Pat. No. US 6479055
Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994, now patented, Pat. No. US 6017536
Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994, now patented, Pat. No. US 5440656
Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Housel, James

ASSISTANT EXAMINER: Parkin, Jeffrey S.

LEGAL REPRESENTATIVE: Pennie & Edmonds LLP

NUMBER OF CLAIMS: 118

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)

LINE COUNT: 25013

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 7 OF 30 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2005-00784 BIOTECHDS

TITLE: Use of type III restriction enzyme to isolate from cDNA of an expressed gene, a tag comprising more than 25 nucleotides and capable of identifying the expressed gene;
rice expressed sequence tag isolation using restriction endonuclease and DNA primer for use in expression profiling and genomics

AUTHOR: KAHL G; WINTER P; KRUEGER D; REICH S; MATSUMURA H; TERAUCHI R

PATENT ASSIGNEE: IWATE PREFECTURAL GOVERNMENT; KAHL G; WINTER P; KRUEGER D; REICH S

PATENT INFO: WO 2004099445 18 Nov 2004

APPLICATION INFO: WO 2003-JP5840 9 May 2003

PRIORITY INFO: WO 2003-5840 9 May 2003; WO 2003-5840 9 May 2003

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2004-821686 [81]

AN 2005-00784 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - Use of a type III restriction enzyme (I) to isolate from cDNA

of an expressed ***gene***, a tag comprising more than 25 nucleotides and capable of identifying the expressed ***gene***, where the 3' end of the tag is defined by a cleavage site of the type III restriction enzyme and the 5' end of the tag is defined by the cleavage site of another restriction enzyme, is new.

DETAILED DESCRIPTION - Use of a type III restriction enzyme (I) to isolate from cDNA of an expressed ***gene***, a tag comprising more than 25 nucleotides and capable of identifying the expressed ***gene***, where the 3' end of the tag is defined by a cleavage site of the type III restriction enzyme and the 5' end of the tag is defined by the cleavage site of another restriction enzyme that is closest to the 3' end of the cDNA of the expressed ***gene***. INDEPENDENT CLAIMS are also included for: (1) a tag comprising more than 25 nucleotides and capable of identifying an expressed ***gene***, where the 3' end of the tag is defined by a cleavage site of a type III restriction enzyme and the 5' end of the tag is defined by the cleavage site of another restriction enzyme that is closest to the 3' end of the cDNA of the expressed ***gene***; (2) a ditag-oligonucleotide (II) comprising two tags each of which is derived from a different expressed ***gene***, where each tag comprises more than 25 nucleotides and is capable of identifying an expressed ***gene***, where the 3' end of the tag is defined by a cleavage site of the type III restriction enzyme and the 5' end of the tag is defined by the cleavage site of another restriction enzyme that is closest to the 3' end of the cDNA of the expressed ***gene***; (3) a ***polynucleotide*** (III) comprising two of (II); (4) ***gene*** expression analysis (M1), comprising synthesizing a cDNA pool from mRNA of expressed ***genes*** using a primer comprising oligo-dT and a recognition ***sequence*** of a type III restriction enzyme, followed by digestion of the cDNA pool with another restriction enzyme, purifying fragments comprising poly A ***sequence*** from the above cDNA pool, and ligating the fragments to either linker-A or linker-B, both of which comprise the recognition ***sequence*** of the type III restriction enzyme, digesting the above fragments with the type III restriction enzyme, and ligating the resulting fragment comprising linker-A to the resulting fragment comprising linker-B after performing a 3'-filling reaction, and digesting the above ligated fragments with the other restriction enzyme to cleave off the linker ***sequence***, and therefore obtaining a ditag-oligonucleotide comprising two tags of more than 25 nucleotides and capable of identifying the expressed ***gene***, ligating the ditag-oligonucleotides to produce a ***polynucleotide***, analyzing the nucleotide ***sequence*** of the above ***polynucleotide***, and quantifying the expression level of an expressed ***gene*** based on the number of tags corresponding to the expressed ***gene*** included in the ***polynucleotide***; and (5) a kit (IV) for isolating a tag comprising more than 25 nucleotides and capable of identifying an expressed ***gene***, comprising a reverse transcriptase (RT) primer defined by the ***sequence*** 5'-N(18-25)-CAGCAG-T(15-25)-3', where N(18-25) is arbitrary nucleotide ***sequence*** from 18-25 not comprising a ***sequence*** 5'-CAGCAG-3' and a ***sequence*** 5'-CATG-3', and where the 5' end of RT-primer may be biotinylated, Linker-A and Linker-B which are double-stranded ***DNA*** different from each other and made by annealing the first strand of ***DNA*** (1): 5'-N(30-40)-CAGCAGCATG-3', and second strand of ***DNA*** (2): 3'-N(30-40)-GTCGTC-5', where N(30-40) are arbitrary nucleotide ***sequences*** from 30-40 which are complementary to each other, and where the 5' end of ***DNA*** (1) may be labeled and the 3' end of ***DNA*** (2) may be amino-modified, and primers capable of hybridizing to the above Linker-A or Linker-B.

BIOTECHNOLOGY - Preferred Restriction Enzyme: (I) is EcoP15I. The other restriction enzyme is NlaIII. Preferred Ditag-oligonucleotide: (II) is produced by (M1). (II) is made by a random association of two tags derived from the different expressed ***genes***. Preferred ***Polynucleotide***: (III) comprises 2-200 ditag-oligonucleotides. Preferred Kit: (IV) further comprises EcoP15I and/or NlaIII.

USE - (I) is useful for isolating from cDNA of an expressed ***gene***, a tag comprising more than 25 nucleotides and capable of identifying the expressed ***gene***. A ***polynucleotide*** (III) is useful for ***gene*** expression analysis which involves analyzing the nucleotide ***sequence*** of (III), and quantifying the expression level of an expressed ***gene*** based on the number of

tags corresponding to the expressed ***gene*** included in the
polynucleotide (all claimed).

ADVANTAGE - The tag isolated by (I) allows accurate quantitative
gene expression analysis and rapid ***gene*** expression
profiling in any ***organism*** for which no expressed
sequence tag (EST) database is available.

EXAMPLE - Tag ***sequences*** ((26- and 27-base pairs (bp)) were
isolated from leaves of a lesion-mimic mutant IB2020 of rice *Oryza*
sativa. Total RNA was isolated from leaf blades of rice by RNA isolation
method. From this RNA, 5 microgram of mRNA were isolated using a mRNA
purification kit. The mRNA was dissolved in 29 microliter of DEPC water,
and used as source material. This mRNA was reverse-transcribed using a
cDNA synthesis system to generate single-stranded cDNA using the reverse
transcription-primer comprising the 5'-CAGCAG-3' motif that is
recognition ***sequence*** of the enzyme EcoP15I. Reverse
transcription-primer: 5'-CTGATCTAGAGGTACCGGATCCGACAGTTTTTTTTTTTTTTTTTTT-
3'. The product was converted to double-stranded cDNA. Resulting
double-stranded cDNA (20 microliter) was digested in 200 microliter
reaction solution comprising 50 units of NlaIII in 1X NEB buffer 4 (NEB)
containing 0.1 ***mg*** /ml bovine serum albumin (BSA) at 37 degrees
centigrade for 90 minutes. After digestion, cDNA was extracted with
TE-equilibrated Phenol/Chloroform/Isoamylalcohol (25:24:1; pH 8.0),
ethanol precipitated, and dissolved in 20 microliter LoTE buffer. In each
of two Eppendorf tubes, 1 ml streptavidin magnetic beads suspension was
transferred. The cDNA bound by magnetic beads was washed three times with
1X BandW buffer and three times with LoTE buffer. The 5'-termini of
Linker-A2 and Linker-B2 were phosphorylated by T4 ***polynucleotide***
kinase (NEB). Linker-A was prepared by annealing Linker-A1 and
phosphorylated Linker-A2, and Linker-B by annealing Linker-B1 and
phosphorylated Linker-B2. To each of the two tubes containing cDNA bound
to magnetic beads, 17 microliter LoTE, 3 microliter 5X ***ligase***
buffer and 1 microgram either of Linker-A or Linker-B were added. After
mixing, tubes were incubated at 50 degrees centigrade for 2 minutes and
left at room ***temperature*** for 15 minutes. After linker ligation,
the beads were washed. Linker-ligated cDNA on the magnetic beads was
digested with 10 units EcoP15I in 100 microliter reaction mixture (10 mM
Tris-HCl pH 8.0, 10 mM KCl, 10 mM MgCl₂, 0.1 mM EDTA, 0.1 mM
dithiothreitol (DTT), 5 microgram/ml BSA, 2 mM ***ATP***). Tubes were
incubated at 37 degrees centigrade for 90 minutes. After EcoP15I
digestion, the tubes were placed on a magnetic stand. After removal of
the biotinylated outermost 3'-terminal fragment by streptavidin coated
magnetic beads, the unbound fraction containing the linker-tag fragments
was collected, and transferred to a new tube. The 5'-protrusion of the
linker-tag fragments was filled-in by ***DNA*** polymerase and
blunted. (53 pages)

L10 ANSWER 8 OF 30 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2004-11627 BIOTECHDS

TITLE: Novel DNA molecule from *Thermotoga* species encoding delta
prime subunit of DNA polymerase III-type enzyme, useful for
producing the enzyme by recombinant techniques;
vector-mediated DNA-polymerase gene transfer and
expression in host cell for recombinant protein production

AUTHOR: O'DONNELL M E; YUZHAKOV A; YURIEVA O; JERUZALMI D; BRUCK I;
KURIYAN J

PATENT ASSIGNEE: O'DONNELL M E; YUZHAKOV A; YURIEVA O; JERUZALMI D; BRUCK I;
KURIYAN J

PATENT INFO: US 2004038290 26 Feb 2004

APPLICATION INFO: US 2003-671419 25 Sep 2003

PRIORITY INFO: US 2003-671419 25 Sep 2003; US 1997-43202 8 Apr 1997

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2004-203219 [19]

AN 2004-11627 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - An isolated ***DNA*** molecule (I) from ****Thermotoga****
species encoding delta' subunit of ***DNA*** polymerase III-type
enzyme, where (I) comprises a fully defined ***sequence*** of 936
nucleotides (S1) as given in specification, encoding fully defined
sequence of 311 amino acids (S2), as given in specification, or

hybridizing to the complement of (S1), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an expression system (II) comprising an expression vector into which is inserted a heterologous (I); and (2) a host cell (III) comprising (II).

WIDER DISCLOSURE - The following are also disclosed as new: (1) gamma subunits of ***Thermus*** ***thermophilus*** (T.th); tau subunit of T.th, Aquifex aeolicus (A.ae), ***Thermotoga*** maritima (T.ma), Bacillus stearothermophilus (B.st); epsilon subunit of T.th, alpha subunit of T.th, A.ae, T.ma, or B.st; delta subunit of T.th, A.ae, T.ma; delta' subunit of T.th, A.ae or B.st; (2) variants including allelic variants, muteins, analogs and fragments of the above mentioned subunits; (3) ***genes*** that correspond to, and code expression for the subunits described above; (4) identifying, isolating and cloning ***DNA*** molecules which encode accessories subunits encoded by the ***genes*** of ***DNA*** polymerase III; (5) polymerase III-type enzymes prepared by purification of an extract taken from a particular ***thermophile***; (6) recombinant gamma, tau, epsilon, alpha, delta, delta', and beta subunits from the ***thermophiles***; (7) identifying polymerase III-type enzymes by long chain extension and elucidation of subunits with antibodies; (8) isolated and purified ***DNA*** polymerase III from T.th, A.ae, T.ma, B.st; (9) preparing ***DNA*** polymerase III enzymes and corresponding subunit ***genes***; (10) use of the enzymes and construct in the preparation, reconstitution or modification of light enzymes; (11) amplifying and sequencing ***DNA*** molecule using ***DNA*** polymerase III-type enzymes or complexes; and (12) kits for amplifying or sequencing ***DNA*** molecules, comprising the ***DNA*** polymerase subunits described above.

BIOTECHNOLOGY - Preferred ***DNA*** Molecule: (I) is derived from T. maritima. Preferably, (I) is capable of forming a portion of a clamp loader that can cooperate with a ***DNA*** polymerase to form a ***DNA*** polymerase III-like particle.

USE - (I) is useful for producing a recombinant ***thermostable*** delta' subunit of a ***DNA*** polymerase III-type enzyme from a ***Thermotoga*** species, comprising transforming a host cell with (I) under conditions suitable for expression of the delta' subunit and isolating the delta' subunit (claimed).

EXAMPLE - Cloning of ***Thermus*** ***thermophilus*** (T.th) dnaQ ***gene*** encoding the epsilon subunit of ***DNA*** polymerase III replication enzyme was carried out as follows. The dnaQ ***gene*** of Escherichia coli and the corresponding region of PolC of Bacillus subtilis, share approximately 30 % identity. Comparison of the predicted amino acid ***sequences*** for DnaQ (epsilon) of E. coli and PolC of B. subtilis revealed two highly conserved regions. Within each of these regions, a nine amino acid ***sequence*** was used to design two oligonucleotide primers for use in the polymerase chain reaction. The regions highly conservative among Pol III exonucleases were chosen to design the degenerate primers for the amplification of a T.th dnaQ internal fragment. ***DNA*** oligonucleotides for amplification of T.th. genomic ***DNA*** were as follows: 5'-GTSGTSNNSGACNNSGAGACSACSGGG-3' and 5'-GAASCCSNNGTCGAASNNGGCGTTGTG-3'. The amplification reactions contained 10 ng T.th genomic ***DNA***, 0.5 mM of each primer, in a volume of 100 microliter of Vent polymerase reaction mixture containing 10 microliter ***ThermoPol*** buffer, 0.5 mM of each dNTP (deoxynucleotide triphosphate) and 0.5 mM MgSO₄. Amplification was performed, and the products were visualized in a 1.5 % native agarose gel. A fragment of the expected size of 270 base pair (bp) was cloned into the SmaI site of pUC19 and ***sequenced***. To obtain further ***sequence*** of the dnaQ ***gene***, genomic ***DNA*** was digested with either mhoI, BamHI, KpnI or NcoI. These restriction enzymes were chosen because they cut T.th genomic ***DNA*** frequently. Approximately 0.1 microgram of ***DNA*** for each digest was ligated by T4 ***DNA*** ***ligase*** in 50 microliter of ligation buffer (50 mM Tris-HCl (pH 7.8), 10 mM MgCl₂, 10 mM dithiothreitol, 1 mM ***ATP***, 25 ***mg*** /ml bovine serum albumin) overnight at 20 degrees centigrade. The ligation mixtures were used for circular PCR. ***DNA*** oligonucleotides for amplification of T.th genomic ***DNA*** were the following: 5'-CGGGGATCCACCTCAATCACCTCGTGG-3' and 5'-CGGGGATCCGCCACCTTGC GGCTCCGGGTG-3'. The amplification reactions contained 1 ng T.th genomic ***DNA***

(that had been cut with NcoI and religated into circular ***DNA*** for circular PCR), 0.4 mM of each primer, in a volume of 100 microliter of Vent polymerase reaction mixture containing 10 microliter ***ThermoPol*** buffer, 0.5 mM of each dNTP, 0.5 mM MgSO₄, and 10 % DMSO (dimethylsulfoxide). A 1.5 kb (kilobase) fragment was obtained and cloned into the BamHI site of the pUC19 vector. Partial sequencing of the fragment revealed that it contained the dnaQ regions adjacent to ***sequences*** corresponding to the PCR primers and therefore contained the ***sequences*** both upstream and downstream of the previously cloned dnaQ fragment. One of the NcoI sites turned out to be approximately 300 bp downstream of the end of the first cloned dnaQ ***sequence*** and therefore did not include the 3' end of the dnaQ. To obtain the 3' end, another inverse PCR reaction was performed. Since an ApaI restriction site was recognized within this newly ***sequenced*** dnaQ fragment, the circular PCR procedure was performed using as template an ApaI digest of T.th genomic ***DNA*** that was ligated (circularized) under the same conditions as described above. ***DNA*** oligonucleotides for the amplification of the ApaI/religated T.Th genomic ***DNA*** were as follows: 5'-GCGCTCTAGACGAGTTCCAAAGCGTGC GG T-3' and 5'-CGCGTCTAGATCACCTGTATCCAGA-3'. The 1.7 kb PCR fragment was cloned into the XbaI site of the pUC19 vector and partially ***sequenced***. The dnaQ ***gene*** was encoded by an open reading frame of 209 amino acids in length, similar to the length of the E. coli epsilon subunit (243 amino acids). The entire amino acid ***sequence*** of the epsilon subunit predicted from the T.th dnaQ ***genes*** of other ***organisms*** with only a few gaps, and insertions. (245 pages)

L10 ANSWER 9 OF 30 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
 ACCESSION NUMBER: 2004-26235 BIOTECHDS

TITLE: Novel heat resistant acetylglutamate kinase derived from
 Sulfolobus tokodaii, useful for producing N-acetyl-L-glutamic
 acid-5-phosphate;
 plasmid-mediated gene transfer and expression in
 Escherichia coli for recombinant thermostable enzyme
 production and purification

PATENT ASSIGNEE: KOKURITSU DAIGAKU HOJIN OOSAKA DAIGAKU

PATENT INFO: JP 2004298187 28 Oct 2004

APPLICATION INFO: JP 2004-81625 19 Mar 2004

PRIORITY INFO: JP 2003-78607 20 Mar 2003; JP 2003-78607 20 Mar 2003

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

OTHER SOURCE: WPI: 2004-769125 [76]

AN 2004-26235 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - A ***heat*** ***resistant*** protein (I) having a fully defined Sulfolobus tokodaii strain 7 derived acetylglutamate kinase ***sequence*** (S1) of 261 amino acids as given in the specification or a ***sequence*** comprising one or more amino acid deletion, substitution, addition or insertion in (S1), and having acetyl glutamic acid kinase activity, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following: (1) a vector (II) containing ***DNA*** encoding (I) or ***DNA*** having a fully defined acetyl glutamic acid kinase ***gene*** ***sequence*** (S2) of 786 base pairs as given in the specification; and (2) a transformed ***organism*** (III) transformed by (II).

BIOTECHNOLOGY - Preferred Protein: (I) acts on N-acetyl-L-glutamate acid in the presence of ***ATP*** to produce N-acetyl-L-glutamate acid-5-phosphate. (I) is derived from a hyperthermophilic archaeobacterium, preferably Sulfolobus tokodaii (JCM10545).

USE - (I) is useful for producing N-acetyl-L-glutamate-5-phosphate from N-acetyl-L-glutamate in the presence of ***ATP*** by an enzymatic reaction, which involves performing the enzymatic reaction using (I), at 85degreesC and at pH of 6.5-8. The enzymatic reaction is arrested by using at least one chelating agent such as EDTA and a bivalent metal ion such as ***Mn*** (2+), Zn(2+) or Cu(2+), after performing a fixed-time enzymatic reaction. (III) is useful for producing (I), which involves culturing (III) and recovering (I) expressed during the culture (claimed).

ADVANTAGE - (I) enables efficient production of N-acetyl-L-glutamate-

5-phosphate even at very high ***temperature*** (85degreesC). (I) provides high reaction efficiency.

EXAMPLE - Chromosomal ***DNA*** was extracted from Sulfolobus tokodaii (JCM10545), processed by proteinase K solution, precipitated using ethanol and the precipitate was dissolved in 5 ml of TE solution. Then, the concentration of the extracted ***DNA*** was determined by measuring light absorbency at 260 nm. ***DNA*** containing restriction enzyme NdeI, BamHI and NotI site adjacent to the translated region of the ***gene*** encoding protein having ***heat*** ***resistant*** acetylglutamate kinase function was constructed by PCR using primers 5'-ATATCATATGATCGTAATCAAAGCTGGAGGAAGATGAATA-3' (forward primer) and 5'-ATATGGATCCGCGGCCGCTTATTACATGATCACCGTTCCCT-3' (reverse primer). The amplified fragment was obtained and deoxyadenosine was added to the 3'-terminal using Ex Taq. The constructed ***DNA*** was ligated to pGEM-T easy vector. The ligated ***DNA*** was introduced in Escherichia coli DH5 alpha strain. The transformed ***organisms*** were cultured. The plasmid was purified and the presence of the insert was confirmed by agarose gel electrophoresis. The structural ***gene*** of ***heat*** ***resistant*** acetylglutamate kinase was purified. PET-11a was digested using NdeI and BamHI and purified. The purified fragment and the structural ***gene*** fragment were ligated using T4 ***ligase***. The ligated ***DNA*** was introduced in E.coli DH5 alpha strain. The transformed ***organisms*** were cultured. The ***gene*** was expressed and the protein was purified and the function and the ***sequence*** were analyzed. The result showed that the protein had a fully defined ***sequence*** of 261 amino acids as given in the specification, had a molecular weight of 28.3 kD. The activity of the purified protein was measured using N-acetyl-L-glutamate, and the enzyme efficiently catalyzed transfer of phosphate group from ***ATP*** to N-acetyl-L-glutamate for producing N-acetyl-L-glutamate-5-phosphate. The optimum ***temperature*** and pH for the activity of acetylglutamate kinase was 85degreesC and pH 6.42, respectively. (12 pages)

L10 ANSWER 10 OF 30 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2004-22353 BIOTECHDS

TITLE: Novel heat-resistant DNA ligase derived from Aeropyrum
pernix, having stable activity during high temperature
experimental conditions, useful in ligase chain reaction;
recombinant enzyme production via plasmid expression in
host cell for use in ligase chain reaction

PATENT ASSIGNEE: DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO

PATENT INFO: JP 2004248636 9 Sep 2004

APPLICATION INFO: JP 2003-45224 24 Feb 2003

PRIORITY INFO: JP 2003-45224 24 Feb 2003; JP 2003-45224 24 Feb 2003

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

OTHER SOURCE: WPI: 2004-638539 [62]

AN 2004-22353 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - ***Heat*** - ***resistant*** ***DNA*** ***ligase***

(I) having a ***sequence*** of 619 amino acids (S1) fully defined in specification or a ***sequence*** of (S1) with one or more amino acid addition, deletion or substitution, where the activity of ***ligase*** not reduced after ***heat*** -processing for one hour at 100 degrees Centigrade, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1)

a ***polynucleotide*** (II) encoding (I), having a ***sequence*** of 1860 nucleotides (S2) fully defined in specification or a ***sequence*** capable of hybridizing to (S2); (2) a vector (III) containing (II); (3) a transformed ***organism*** (IV) containing (III); and (4) extracting ***heat*** - ***resistant*** ***DNA*** ***ligase*** from a transformed ***organism***, involves culturing (IV) and recovering ***ligase*** from the culture.

BIOTECHNOLOGY - Preferred ***DNA*** ***Ligase*** : (I) has an optimum ***temperature*** of 70 degrees Centigrade or more. (I) utilizes ***ATP*** or ***ADP***, Mg²⁺, Mn²⁺, Ca²⁺ or Co²⁺, as a ***co*** -factor. (I) is derived from Aeropyrum pernix.

USE - (I) is useful in ***ligase*** chain reactions (LCR).

ADVANTAGE - (I) is ***heat*** - ***resistant*** and the

activity of (I) does not reduce when used in high ***temperature*** experimental conditions. (I) is stable for long period of time. (I) avoids frequent cooling reactions in LCR required for preventing deactivation of the enzyme, as the enzyme is stable in high ***temperature*** experimental conditions.

EXAMPLE - Chromosomal ***DNA*** was extracted from Aeropyrum pernix K-1 strain. The extracted ***DNA*** was amplified using a primer having the ***sequence*** 5'-GGCTGCTCTGGTTTGGCTTCT-3'. The amplified product was purified and inserted into a vector pET-3d and the resulting vector was designated as pET-8c. The vector was transformed into Escherichia coli JM109 strain. The transformed E.coli containing the ***DNA*** ***ligase*** ***gene*** was inoculated into the NZCYM culture medium. The microbial cells were collected from the culture and centrifuged. The enzyme fraction (molecular weight 69 kDa) was isolated from the supernatant liquid by gel filtration chromatography. The obtained enzyme had a ***sequence*** of 619 amino acids fully defined in specification. The ***heat*** - ***resistant*** property of ***DNA*** - ***ligase*** was tested by incubating the enzyme at 100 degrees Centigrade for one hour and the activity of ***DNA*** ***ligase*** enzyme was found to be 97%. (19 pages)

L10 ANSWER 11 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:318632 USPATFULL

TITLE: Novel human transferase family members and uses thereof

INVENTOR(S): Meyers, Rachel E., Newton, MA, UNITED STATES
Williamson, Mark, Saugus, MA, UNITED STATES
Leiby, Kevin R., Natick, MA, UNITED STATES
Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED STATES
Olandt, Peter J., Newton, MA, UNITED STATES
MacBeth, Kyle J., Boston, MA, UNITED STATES
Rudolph-Owen, Laura A., Jamaica Plain, MA, UNITED STATES
Tsai, Fong-Ying, Newton, MA, UNITED STATES
Hunter, John J., Somerville, MA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2003224376 A1 20031204

APPLICATION INFO.: US 2002-184648 A1 20020627 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-815028, filed on 22 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-801220, filed on 7 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-816714, filed on 23 Mar 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-844948, filed on 27 Apr 2001, PENDING Continuation-in-part of Ser. No. US 2001-861164, filed on 18 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-883060, filed on 15 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2001-962678, filed on 25 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-973457, filed on 9 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2002-72285, filed on 8 Feb 2002, PENDING Continuation-in-part of Ser. No. US 2001-817910, filed on 26 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-842528, filed on 25 Apr 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-882836, filed on 15 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2001-882872, filed on 15 Jun 2001, ABANDONED

NUMBER DATE

PRIORITY INFORMATION: WO 2001-US9358 20010322

WO 2001-US7269 20010307
WO 2001-US9468 20010323
WO 2001-US13805 20010427
WO 2001-US16292 20010518
WO 2001-US19138 20010615
WO 2001-US29963 20010925

WO 2002-US3736 20020208
 WO 2001-US9633 20010326
 WO 2001-US40607 20010425
 WO 2001-US19543 20010615
 WO 2001-US19153 20010615
 US 2000-191964P 20000324 (60)
 US 2000-187456P 20000307 (60)
 US 2000-191865P 20000324 (60)
 US 2000-200604P 20000428 (60)
 US 2000-205408P 20000519 (60)
 US 2000-212079P 20000615 (60)
 US 2000-235044P 20000925 (60)
 US 2000-238849P 20001006 (60)
 US 2001-267494P 20010208 (60)
 US 2000-192092P 20000324 (60)
 US 2000-199500P 20000425 (60)
 US 2000-211730P 20000615 (60)
 US 2000-212077P 20000615 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Theodore R. Allen, Millennium Pharmaceuticals, Inc., 75
 Sidney Street, Cambridge, MA, 02139

NUMBER OF CLAIMS: 19

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 125 Drawing Page(s)

LINE COUNT: 66695

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated 33877, 47179, 26886, 25552, 32132, 32244, 23680, 32624, 47174, 60491, 46743, 27417, 27960, 32252, and 53320 nucleic acid molecules, which encode novel human transferase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 33877, 47179, 26886, 25552, 32132, 32244, 23680, 32624, 47174, 60491, 46743, 27417, 27960, 32252, or 53320 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 33877, 47179, 26886, 25552, 32132, 32244, 23680, 32624, 47174, 60491, 46743, 27417, 27960, 32252, or 53320 gene has been introduced or disrupted. The invention still further provides isolated 33877, 47179, 26886, 25552, 32132, 32244, 23680, 32624, 47174, 60491, 46743, 27417, 27960, 32252, or 53320 proteins, fusion proteins, antigenic peptides and anti-33877, 47179, 26886, 25552, 32132, 32244, 23680, 32624, 47174, 60491, 46743, 27417, 27960, 32252, or 53320 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 12 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:237907 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis
 of colon cancer

INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES
 Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
 Xu, Jiangchun, Bellevue, WA, UNITED STATES
 Secrist, Heather, Seattle, WA, UNITED STATES
 Jiang, Yuqiu, Kent, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
 (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003166064 A1 20030904

APPLICATION INFO.: US 2002-99926 A1 20020314 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-33528, filed
 on 26 Dec 2001, PENDING Continuation-in-part of Ser.
 No. US 2001-920300, filed on 31 Jul 2001, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2001-302051P 20010629 (60)

US 2001-279763P 20010328 (60)

US 2000-223283P 20000803 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 17

EXEMPLARY CLAIM: 1

LINE COUNT: 8531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 13 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:106914 USPATFULL

TITLE: Flea head, nerve cord, hindgut and malpighian tubule nucleic acid molecules, proteins and uses thereof

INVENTOR(S): Brandt, Kevin S., Windsor, CO, UNITED STATES
Gaines, Patrick J., Fort Collins, CO, UNITED STATES
Stinchcomb, Dan T., Fort Collins, CO, UNITED STATES
Wisniewski, Nancy, Fort Collins, CO, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2003073827 A1 20030417

APPLICATION INFO.: US 2001-991936 A1 20011121 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-543668, filed on 7 Apr 2000, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 1999-128704P 19990409 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HESKA CORPORATION, INTELLECTUAL PROPERTY DEPT., 1613 PROSPECT PARKWAY, FORT COLLINS, CO, 80525

NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM: 1

LINE COUNT: 7791

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to flea head, nerve cord, hindgut and Malpighian tubule proteins; to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising proteins, nucleic acid molecules, or protective compounds derived from proteins of the present invention as well as the use of such therapeutic compositions to protect animals from flea infestation. Also included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule proteins to derive inhibitory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 14 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:106233 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis of pancreatic cancer

INVENTOR(S): Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003073144 A1 20030417
APPLICATION INFO.: US 2002-60036 A1 20020130 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2001-333626P 20011127 (60)

US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH
AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 17

EXEMPLARY CLAIM: 1

LINE COUNT: 14253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 15 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:95966 USPATFULL

TITLE: Polynucleotides, materials incorporating them, and
methods for using them

INVENTOR(S): Glenn, Matthew, Auckland, NEW ZEALAND
Havukkala, Ilkka J., Auckland, NEW ZEALAND
Blokberg, Leonard N., Auckland, NEW ZEALAND
Lubbers, Mark W., Palmerston North, NEW ZEALAND
Dekker, James, Palmerston North, NEW ZEALAND
Christensson, Anna C., Lund, SWEDEN
Holland, Ross, Palmerston North, NEW ZEALAND
O'Toole, Paul W., Palmerston North, NEW ZEALAND
Reid, Julian R., Palmerston North, NEW ZEALAND
Coolbear, Timothy, Palmerston North, NEW ZEALAND

PATENT ASSIGNEE(S): Genesis Research & Development Corp. Ltd, Parnell, NEW
ZEALAND (non-U.S. corporation)
Via Lachia Bioscience (NZ) Ltd., Auckland, NEW ZEALAND
(non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6544772 B1 20030408
APPLICATION INFO.: US 2000-634238 20000808 (9)
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Brusca, John S.

LEGAL REPRESENTATIVE: Sleath, Janet, Speckman, Ann W.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 2015
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel polynucleotides isolated from *Lactobacillus rhamnosus*, as well as probes and primers, genetic constructs comprising the polynucleotides, biological materials, including plants, microorganisms and multicellular organisms incorporating the polynucleotides, polypeptides expressed by the polynucleotides, and methods for using the polynucleotides and polypeptides are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 16 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2003:40533 USPATFULL
TITLE: Methods for the inhibition of epstein-barr virus
transmission employing anti-viral peptides capable of
abrogating viral fusion and transmission
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6518013 B1 20030211
APPLICATION INFO.: US 1995-485546 19950607 (8)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-360107, filed
on 20 Dec 1994, now patented, Pat. No. US 6017536
Continuation-in-part of Ser. No. US 1994-255208, filed
on 7 Jun 1994 Continuation-in-part of Ser. No. US
1993-73028, filed on 7 Jun 1993, now patented, Pat. No.
US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP, Nelson, M. Bud
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 24700
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fusion of the viral envelope, or infected cell membranes with uninfected cell membranes, is an essential step in the viral life cycle. Recent studies involving the human immunodeficiency virus type 1(HIV-1) demonstrated that synthetic peptides (designated DP-107 and DP-178) derived from potential helical regions of the transmembrane (TM) protein, gp41, were potent inhibitors of viral fusion and infection. A computerized antiviral searching technology (C.A.S.T.) that detects related structural motifs (e.g., ALLMOTI 5, 107.times.178.times.4, and PLZIP) in other viral proteins was employed to identify similar regions in the Epstein-Barr virus (EBV). Several conserved heptad repeat domains that are predicted to form coiled-coil structures with antiviral activity were identified in the EBV genome. Synthetic peptides of 16 to 39 amino acids derived from these regions were prepared and their antiviral activities assessed in a suitable in vitro screening assay. These peptides proved to be potent inhibitors of EBV fusion. Based upon their structural and functional equivalence to the known HIV-1 inhibitors DP-107 and DP-178, these peptides should provide a novel approach to the development of targeted therapies for the treatment of EBV infections.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 17 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2002:272801 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis
of colon cancer
INVENTOR(S): Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2002150922 AI 20021017
APPLICATION INFO.: US 2001-998598 AI 20011116 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH
AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer,
particularly colon cancer, are disclosed. Illustrative compositions
comprise one or more colon tumor polypeptides, immunogenic portions
thereof, polynucleotides that encode such polypeptides, antigen
presenting cell that expresses such polypeptides, and T cells that are
specific for cells expressing such polypeptides. The disclosed
compositions are useful, for example, in the diagnosis, prevention
and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 18 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2002:243051 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis
of ovarian cancer
INVENTOR(S): Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2002132237 AI 20020919
APPLICATION INFO.: US 2001-867701 AI 20010529 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-207484P 20000526 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH
AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer,
particularly ovarian cancer, are disclosed. Illustrative compositions
comprise one or more ovarian tumor polypeptides, immunogenic portions
thereof, polynucleotides that encode such polypeptides, antigen
presenting cell that expresses such polypeptides, and T cells that are

specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 19 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:221971 USPATFULL

TITLE: ENTEROCOCCUS FAECALIS POLYNUCLEOTIDES AND POLYPEPTIDES

INVENTOR(S): KUNSCH, CHARLES A., ATLANTA, GA, UNITED STATES

DILLON, PATRICK J., CARLSBAD, CA, UNITED STATES

BARASH, STEVEN, ROCKVILLE, MD, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2002120116 A1 20020829

APPLICATION INFO.: US 1998-70927 A1 19980504 (9)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,
ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 13315

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides polynucleotide sequences of the genome of *Enterococcus faecalis*, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynucleotides, and assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 20 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:55159 USPATFULL

TITLE: STREPTOCOCCUS PNEUMONIAE POLYNUCLEOTIDES AND SEQUENCES

INVENTOR(S): KUNSCH, CHARLES A., GAITHERSBURG, MD, UNITED STATES

CHOI, GIL H., ROCKVILLE, MD, UNITED STATES

DILLON, PATRICK J., CARLSBAD, CA, UNITED STATES

ROSEN, CRAIG A., LAYTONSVILLE, MD, UNITED STATES

BARASH, STEVEN C., ROCKVILLE, MD, UNITED STATES

FANNON, MICHAEL R., SILVER SPRING, MD, UNITED STATES

DOUGHERTY, BRIAN A., MT. AIRY, MD, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2002032323 A1 20020314

US 6420135 B2 20020716

APPLICATION INFO.: US 1997-961527 A1 19971030 (8)

NUMBER DATE

PRIORITY INFORMATION: US 1996-29960P 19961031 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,
ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 7752

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides polynucleotide sequences of the genome of *Streptococcus pneumoniae*, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynucleotides, and

assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 21 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:297296 USPATFULL

TITLE: Methods for inhibition of membrane fusion-associated events, including respiratory syncytial virus transmission

INVENTOR(S): Bolognesi, Dani Paul, Durham, NC, United States
Matthews, Thomas James, Durham, NC, United States
Wild, Carl T., Durham, NC, United States
Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
Langlois, Alphonse J., Durham, NC, United States

PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6479055 B1 20021112
APPLICATION INFO.: US 1995-470896 19950606 (8)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994, now patented, Pat. No. US 6017536
Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994
Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Stucker, Jeffrey

LEGAL REPRESENTATIVE: Pennie & Edmonds LLP

NUMBER OF CLAIMS: 44

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)

LINE COUNT: 26553

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-viral activity. In particular, the invention relates to methods of using such peptides as inhibitory of respiratory syncytial virus ("RSV") transmission to uninfected cells. The peptides used in the methods of the invention are homologs of the DP-178 and DP-107 peptides, peptides corresponding to amino acid residues 638 to 673, and to amino acid residues 558 to 595, respectively, of the HIV-1.sub.LAI transmembrane protein (TM) gp41.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 22 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2001:188946 USPATFULL

TITLE: Methods for using functional site descriptors and predicting protein function

INVENTOR(S): Skolnick, Jeffrey, San Diego, CA, United States
Fetrow, Jacquelyn S., San Diego, CA, United States

NUMBER KIND DATE

PATENT INFORMATION: US 2001034580 A1 20011025
US 6631332 B2 20031007
APPLICATION INFO.: US 2001-839821 A1 20010420 (9)
RELATED APPLN. INFO.: Division of Ser. No. US 1999-322067, filed on 27 May 1999, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 1998-99300P 19980825 (60)

US 1999-120311P 19990216 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GREGORY P. EINHORN, Fish & Richardson P.C., 4350 La
Jolla Village Drive, Suite 500, San Diego, CA, 92122
NUMBER OF CLAIMS: 52
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 4841

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention concerns methods and systems for predicting the biological function(s) of proteins. The invention is based on the development of functional site descriptors for discrete protein biological functions. Functional site descriptors are geometric representations of protein functional sites in three-dimensional space, and can also include additional parameters, for example, conformational information. Following their development, one or more functional site descriptors (for one or more different biological functions) are used to probe protein structures to determine if such structures contain the functional sites described by the corresponding functional site descriptors. If so, the protein(s) containing the functional site(s) are predicted to have the corresponding biological function(s). In preferred embodiments, a library of functional site descriptors is used to probe inexact protein structures derived by computational methods from amino acid sequence information to predict the biological function(s) of such sequences and of the gene(s) encoding the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 23 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2001:67794 USPATFULL
TITLE: Human respiratory syncytial virus peptides with
antifusogenic and antiviral activities
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 6228983	B1	20010508
APPLICATION INFO.:	US 1995-485264		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 62
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 32166

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit antifusogenic and antiviral activities. The peptides of the invention consist of a 16 to 39 amino acid region of a human respiratory syncytial virus protein. These regions were identified through computer algorithms capable of recognizing the ALLMOTI5, 107x178x4, or PLZIP amino acid motifs. These motifs are associated with the antifusogenic and antiviral activities of the claimed peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 24 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2000:95093 USPATFULL
TITLE: Isolated peptides derived from the Epstein-Barr virus
containing fusion inhibitory domains
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6093794 20000725
APPLICATION INFO.: US 1995-471913 19950607 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun
1995 which is a continuation-in-part of Ser. No. US
1994-360107, filed on 20 Dec 1994 which is a
continuation-in-part of Ser. No. US 1994-255208, filed
on 7 Jun 1994 which is a continuation-in-part of Ser.
No. US 1993-73028, filed on 7 Jun 1993, now patented,
Pat. No. US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 52 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 19949

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent
anti-retroviral activity. The peptides of the invention comprise DP178
(SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the
HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of
DP178. The invention further relates to the uses of such peptides as
inhibitory of human and non-human retroviral, especially HIV,
transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 25 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2000:67564 USPATFULL
TITLE: Methods for inhibition of membrane fusion-associated
events, including influenza virus
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6068973 20000530
APPLICATION INFO.: US 1995-485551 19950607 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun
1995 which is a continuation-in-part of Ser. No. US
1994-360107, filed on 20 Dec 1994 which is a
continuation-in-part of Ser. No. US 1994-255208, filed
on 7 Jun 1994 which is a continuation-in-part of Ser.
No. US 1993-73028, filed on 7 Jun 1993, now patented,
Pat. No. US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Park, Hankyel
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 52 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 12021

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 26 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2000:57361 USPATFULL

TITLE: Compositions for inhibition of membrane fusion-associated events, including influenza virus transmission

INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States

PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S. corporation)
Duke University, Durham, NC, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6060065 20000509

APPLICATION INFO.: US 1995-475668 19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 which is a continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Achutamurthy, Ponnathapura

ASSISTANT EXAMINER: Parley, Hankyel T.

LEGAL REPRESENTATIVE: Pennie & Edmonds, LLP

NUMBER OF CLAIMS: 5

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)

LINE COUNT: 19987

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to viral peptides referred to as "DP107- and DP178-like" peptides. Specifically, the invention relates to isolated influenza A DP107- and DP178-like peptides which are identified by sequence search motif algorithms. The peptides of the invention exhibit antiviral activity believed to result from inhibition of viral induced fusogenic events.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 27 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2000:50515 USPATFULL

TITLE: Screening assays for compounds that inhibit membrane fusion-associated events

INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Jr., Stephen Robert, Cary, NC, United States

PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6054265 20000425

APPLICATION INFO.: US 1997-919597 19970926 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 which is a

continuation-in-part of Ser. No. US 1994-255208, filed
on 7 Jun 1994 which is a continuation-in-part of Ser.
No. US 1993-73028, filed on 7 Jun 1993, now patented,
Pat. No. US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stucker, Jeffrey
LEGAL REPRESENTATIVE: Pennie & Edmonds, LLP
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 83 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 21307

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent
anti-retroviral activity. The peptides of the invention comprise DP178
(SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the
HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of
DP178. The invention further relates to the uses of such peptides as
inhibitory of human and non-human retroviral, especially HIV,
transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 28 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2000:12922 USPATFULL
TITLE: Isolated peptides derived from human immunodeficiency
virus types 1 and 2 containing fusion inhibitory
domains
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6020459 20000201
APPLICATION INFO.: US 1995-484223 19950607 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun
1995 which is a continuation-in-part of Ser. No. US
1994-360107, filed on 20 Dec 1994 which is a
continuation-in-part of Ser. No. US 1994-255208, filed
on 7 Jun 1994 which is a continuation-in-part of Ser.
No. US 1993-73028, filed on 7 Jun 1993, now patented,
Pat. No. US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 75
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 52 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 20335

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent
anti-retroviral activity. The peptides of the invention comprise DP178
(SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the
HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of
DP178. The invention further relates to the uses of such peptides as
inhibitory of human and non-human retroviral, especially HIV,
transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 29 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2000:9527 USPATFULL
TITLE: Simian immunodeficiency virus peptides with
antifusogenic and antiviral activities
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States

Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
Langlois, Alphonse J., Durham, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6017536 20000125
APPLICATION INFO.: US 1994-360107 19941220 (8)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-255208, filed
on 7 Jun 1994 which is a continuation-in-part of Ser.
No. US 1993-73028, filed on 7 Jun 1993, now patented,
Pat. No. US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 50 Drawing Figure(s); 62 Drawing Page(s)
LINE COUNT: 20227

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit antifusogenic
and antiviral activities. The peptides of the invention consist of a 16
to 39 amino acid region of a simian immunodeficiency virus (SIV)
protein. These regions were identified through computer algorithms
capable of recognizing the ALLMOT15, 107.times.178.times.4, or PLZIP
amino acid motifs. These motifs are associated with the antifusogenic
and antiviral activities of the claimed peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 30 OF 30 USPATFULL on STN
ACCESSION NUMBER: 2000:4427 USPATFULL
TITLE: Measles virus peptides with antifusogenic and antiviral
activities
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6013263 20000111
APPLICATION INFO.: US 1995-486099 19950607 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun
1995 which is a continuation-in-part of Ser. No. US
1994-360107, filed on 20 Dec 1994 Ser. No. Ser. No. US
1994-255208, filed on 7 Jun 1994 And Ser. No. US
1993-73028, filed on 7 Jun 1993, now patented, Pat. No.
US 5464933

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 52 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 19827

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent
anti-retroviral activity. The peptides of the invention comprise DP178
(SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the
HIV-1.sub.LAI gp41 protein, and fragments, analogs and homologs of
DP178. The invention further relates to the uses of such peptides as
inhibitory of human and non-human retroviral, especially HIV,

transmission to uninfected cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 12:26:49 ON 22 DEC 2005)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 12:27:09 ON 22 DEC 2005
SEA ((HEAT(S)RESISTANT(S)DNA(S)LIGASE#) OR (DNA(S)LIGASE#) OR (

L1 QUE ((HEAT(S) RESISTANT(S) DNA(S) LIGASE#) OR (DNA(S) LIGASE#)

FILE 'USPATFULL, CAPLUS, BIOSIS, MEDLINE, TOXCENTER, SCISEARCH, LIFESCI, ESBIOBASE, EMBASE, BIOTECHNO, BIOTECHDS, WPIDS' ENTERED AT 12:31:45 ON 22 DEC 2005

L2 66094 S L1
L3 32422 S (GENE# OR SEQUENCE# OR POLYNUCLEOTIDE#) (S) L2
L4 6055 S (TEMPERATURE# OR HEAT OR THERM?)(S)L3
L5 1203 S (ATP OR ADP OR COFACTOR#)(S)L4
L6 333 S (MG OR MN OR CA OR CO)(S)L5
L7 4 S PERNIX(S)L6
L8 4 S AEROPYRUM(S)L6
L9 30 S ORGANISM# (S)L6
L10 30 DUP REM L9 (0 DUPLICATES REMOVED)
L11 2 DUP REM L7 (2 DUPLICATES REMOVED)

=> d ibib abs L11 1-2

L11 ANSWER 1 OF 2 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2004-22353 BIOTECHDS

TITLE: Novel heat-resistant DNA ligase derived from Aeropyrum
pernix, having stable activity during high temperature
experimental conditions, useful in ligase chain reaction;
recombinant enzyme production via plasmid expression in
host cell for use in ligase chain reaction

PATENT ASSIGNEE: DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO

PATENT INFO: JP 2004248636 9 Sep 2004

APPLICATION INFO: JP 2003-45224 24 Feb 2003

PRIORITY INFO: JP 2003-45224 24 Feb 2003; JP 2003-45224 24 Feb 2003

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

OTHER SOURCE: WPI: 2004-638539 [62]

AN 2004-22353 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - ***Heat*** - ***resistant*** ***DNA*** ***ligase***

(I) having a ***sequence*** of 619 amino acids (S1) fully defined in
specification or a ***sequence*** of (S1) with one or more amino acid
addition, deletion or substitution, where the activity of ***ligase***
not reduced after ***heat*** -processing for one hour at 100 degrees
Centigrade, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1)

a ***polynucleotide*** (II) encoding (I), having a ***sequence***
of 1860 nucleotides (S2) fully defined in specification or a
sequence capable of hybridizing to (S2); (2) a vector (III)
containing (II); (3) a transformed organism (IV) containing (III); and
(4) extracting ***heat*** - ***resistant*** ***DNA***
ligase from a transformed organism, involves culturing (IV) and
recovering ***ligase*** from the culture.

BIOTECHNOLOGY - Preferred ***DNA*** ***Ligase*** : (I) has an
optimum ***temperature*** of 70 degrees Centigrade or more. (I)
utilizes ***ATP*** or ***ADP***, Mg²⁺, Mn²⁺, Ca²⁺ or Co²⁺, as a
co -factor. (I) is derived from Aeropyrum ***pernix***.

USE - (I) is useful in ***ligase*** chain reactions (LCR).

ADVANTAGE - (I) is ***heat*** - ***resistant*** and the

activity of (I) does not reduce when used in high ***temperature*** experimental conditions. (I) is stable for long period of time. (I) avoids frequent cooling reactions in LCR required for preventing deactivation of the enzyme, as the enzyme is stable in high ***temperature*** experimental conditions.

EXAMPLE - Chromosomal ***DNA*** was extracted from Aeropyrum ***pernix*** K-1 strain. The extracted ***DNA*** was amplified using a primer having the ***sequence*** 5'-GGCTGTCTGGTTTGGCTTCT-3'. The amplified product was purified and inserted into a vector pET-3d and the resulting vector was designated as pET-8c. The vector was transformed into Escherichia coli JM109 strain. The transformed E.coli containing the ***DNA*** ***ligase*** ***gene*** was inoculated into the NZCYM culture medium. The microbial cells were collected from the culture and centrifuged. The enzyme fraction (molecular weight 69 kDa) was isolated from the supernatant liquid by gel filtration chromatography. The obtained enzyme had a ***sequence*** of 619 amino acids fully defined in specification. The ***heat*** - ***resistant*** property of ***DNA*** - ***ligase*** was tested by incubating the enzyme at 100 degrees Centigrade for one hour and the activity of ***DNA*** ***ligase*** enzyme was found to be 97%. (19 pages)

L11 ANSWER 2 OF 2 LIFESCI COPYRIGHT 2005 CSA on STN DUPLICATE 1
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TITLE: A novel ADP-dependent DNA ligase from Aeropyrum pernix K1

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SUMMARY LANGUAGE: English

AB A ***gene*** encoding a putative ***ATP*** -dependent ***DNA*** ***ligase*** from the aerobic hyperthermophilic archaeon Aeropyrum ***pernix*** K1 was cloned and the biochemical characteristics of the resulting recombinant protein were examined. The ***gene*** (accession no. APE1094) from A. ***pernix*** encoding a 69-kDa protein showed a 39-61% identity with other ***ATP*** -dependent ***DNA*** ***ligases*** from the archaea. Normally ***DNA*** ***ligase*** is activated by NAD super(+) or ***ATP***. There has been no report about the other activators for ***DNA*** ***ligase***. The recombinant ***ligase*** was a monomeric protein and catalyzed strand joining on a singly nicked ***DNA*** substrate in the presence of ***ADP*** and a divalent cation (***Mg*** super(2+), ***Mn*** super(2+), ***Ca*** super(2+) and ***Co*** super(2+)) at high ***temperature***. The optimum ***temperature*** and pH for nick-closing activity were above 70 degree C and 7.5 degree C, respectively. The ***ligase*** remained stable for 60 min of treatment at 100 degree C, and the half-life was about 25 min at 110 degree C. This is the first report of a novel hyperthermostable ***DNA*** ***ligase*** that can utilize ***ADP*** to activate the enzyme.

=> log y